

Fall 2018

GUIDELINES FOR GRADUATE STUDENTS



Most students enter a relationship with a thesis adviser without a clear idea of what they can expect so I have compiled this handout to give you some information about what I expect of you as a student and what you can expect of me as an adviser.

Your reasons for wanting to get a M.S. degree will affect how we tailor your experience here to best meet your overall goals. The main part of my role is to act as a mentor and provide direction and advice on your thesis project. I will try to provide assistance with project design, your literature search for background information, lab procedures, data analysis, and writing. I will expect that you take increasing levels of initiative in guiding your work. I will also work with you on giving various types of informal and formal presentations of your work. One of my goals for your experience here will be to teach you how to do good science and develop transferrable skills along with how to do your specific project. I hope that you leave here with experience and knowledge that will help you complete future research projects, not just knowing how to do a project just like your M.S. project.

TIME

The time commitment to research tends to be one of the most important issues for graduate students and mentors. I expect you to regard graduate school as a full time job (with room for both vacations and overtime). I anticipate that you will occasionally need to take days off and also take vacations. Since you are being paid as a full time graduate student from taxpayer funding, I will expect you to work during at least part of most academic 'vacations' (winter break). On the subject of overtime, there will probably be times when you will need to work weekends if a deadline is near. You might find that during your first semester you seem to have time on your hands but that you are not sure exactly what you are supposed to be doing. This is normal! Come and see me if this is the case. As you approach the end of your graduate work here, you will probably find that you will work more hours so that you can finish on the time line you identify. Although this unequal distribution of work does not occur for everyone, this seems to be a typical experience for grad students.

I expect that courses will take up about 20 hours/week and research will take about 20 hours/week. I am certainly aware that there will be short-term fluctuations in these numbers, but these should be average. If you need to take some time off, I expect you will make up those hours.

You can expect a moderate amount of supervision from me, but I expect that you will be able to budget your time reasonably and become an independent worker. As you start new parts of your project, I will plan to spend time with you to be sure you have the tools you need to move forward with your work. If you find yourself unsure what steps to take, please develop some ideas and then come talk with me, don't sit around waiting to be told what to do every step of the way.

I have an open door policy and you can normally interrupt me with questions or to discuss a problem. However I ask that you *try* to figure out the answer first. There may be times when I cannot take the time to have lengthy conversations with you, but I will try to let you know when I am particularly busy. I think you will find that most of the faculty here have an open door policy, but you should be sensitive to the fact that sometimes we have deadlines to meet / classes to prepare for and do not have time to be chatty. I encourage you to get to know the other faculty in the department and draw on their assistance if you need it.

As long as I can see progress towards your goals at a reasonable pace, I will not pay much attention to how you spend your time. Each semester, we will sit down together and identify reasonable goals to be completed by the end of that semester. We will write them down and revisit them periodically throughout the semester during our weekly lab meetings.

LAB/FIELD WORK

I don't expect that you will be perfect when completing lab/field work - everyone makes mistakes. However, I do expect you to use lab equipment with care, to keep a detailed notebook of

ALL of your lab activities and to let me know if equipment seems to be having trouble. *It is vital that you keep detailed notes.* Although it may seem redundant or unimportant at times, it will help you during project and will help me after you leave. (I often refer to notes I made in my lab notebook years ago.)

- ❖ Remember, when it comes to lab equipment, brute strength is generally NOT the answer!
- ❖ Always let me know if equipment has been broken or you suspect something may be broken or damaged. It is likely that I will only get upset if you don't let me know what happened and haven't kept thorough lab notes so we can identify subtle problems.
- ❖ Safety always comes first. Always wear eye protection, gloves, and close-toed shoes when working with chemicals.

If other students or faculty want to borrow things from the lab: (1) if it is a common item, leave a note with the person's name and the date it was borrowed in the place of the item or (2) if it is an expensive or difficult-to-replace item, consult with me before lending it out.

PROFESSIONALISM

During your time here, I hope that you will develop as a professional. This means:

- ❖ always treating others and their scientific ideas with respect and tolerance (even if you disagree)
- ❖ taking responsibility for your own actions and duties
- ❖ willingness to ask questions when you don't know the answer
- ❖ helping other students when they ask for it
- ❖ Criticism can be a sensitive issue and I will try to provide you *constructive* criticism and I expect that you will provide your fellow students and me the same.
- ❖ being good citizen of the department by volunteering, when reasonable, for requests that come up for things like lab tours and being an audience when undergraduate are presenting their work
- ❖ mentoring undergraduate researchers in our lab as appropriate opportunities arise

MISCELLANEOUS

PHONE: There is a telephone in the lab that you can use for local calls.

COPIES: You can use the machine in SL118 for work-related copying needs.

COMPUTERS: email soshelp@iupui.edu if you have problems with your computer.

TRAVEL & RESEARCH \$\$: The university has money you can apply for in order to cover travel expenses and small research expenses. I prefer that we try to use external money that is available before tapping into the travel budget from grants. There are also research grants from organizations like the Geological Society of America that I strongly encourage you to apply for to build grant writing skills and get some additional research funding. These will look good on your CV.

COLLOQUIUM: The department-sponsored colloquium talks happen most Mondays. You are expected to attend all talks and are encouraged to ask questions.

LAB MEETING: We will have weekly lab meetings. Please participate fully by listening to others when they speak, asking questions and participating in discussions.

PROPOSAL: You are required to write a thesis proposal in your second semester that must be approved by your three committee members. It is your responsibility to set up committee meetings to discuss your research plan and what courses are best for you. Think of your committee as your advisory board who is there to guide/advise you to optimize your work efforts. A guideline to help you construct your proposal is available and ask 2nd year students for a copy of their proposal.

You can always call me if you need to:

Remember, you are ultimately responsible for the timely completion of your thesis, but I will try to help you achieve that goal. I expect that you will do an excellent job and I hope that the process is fun and intellectually challenging!